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1. Glucose.
2. Kathon[®] ICP/CG II (Rohm & Haas).
3. Bartac[®] 2050 (Lonza).
4. Bartac[®] LF-80 (Lonza).
5. Distilled, de-ionized water.

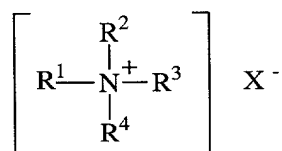
- WHAT IS CLAIMED IS:

1. A composition for controlling plant and flower moisture transpiration, said composition comprising:
- 5 a) from about 0.5% by weight, of a source of energy;
- b) from about 0.05 % by weight, of one or more antimicrobials; and
- c) the balance carriers and adjunct ingredients.
2. An aqueous composition for controlling plant and flower moisture transpiration, said composition comprising:
- 10 a) from about 0.1% by weight, of a source of energy;
- b) from about 5 ppm by weight, of one or more antimicrobials;
- c) from about 1 ppm by weight, of a buffer; and
- d) the balance carriers and adjunct ingredients.
3. A composition according to Claim 2 wherein said source of energy comprises a
- 15 saccharide, oligosaccharide, polysaccharide, or mixtures thereof.
4. A composition according to Claim 3 wherein said source of energy comprises sucrose, glucose, or mixtures thereof.
- 20 5. A composition according to Claim 4 wherein said source of energy is glucose.
6. A composition according to Claim 3 wherein said source of energy is an oligosaccharide.
7. A composition according to Claim 1 comprising from about 0.5% to about 10% by
- 25 weight, of a source of energy.
8. A composition according to Claim 7 comprising from about 1% by weight, of a source of energy.
- 30 9. A composition according to Claim 8 comprising to about 5% by weight, of a source of energy.

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10. A composition according to Claim 1 wherein said antimicrobial is selected from the group consisting of 2-methyl-4-isothiazolin-3-one, 5-chloro-2-methyl-4-isothiazolin-3-one, and mixtures thereof.

- 5 11. A composition according to Claim 1 wherein said antimicrobial has the formula:



wherein R¹ and R² are each independently C₈-C₂₀ linear or branched alkyl, benzyl, and mixtures thereof; R³ and R⁴ are each independently C₁-C₄ alkyl, and mixtures thereof; X is an anion of sufficient charge to provide electronic neutrality.

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12. A composition according to Claim 2 wherein said buffer is selected from the group consisting of citric acid, itaconic acid, malonic acid, maleic acid, caffeic acid, succinic acid, adipic acid, sebacic acid, and salts thereof.

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13. A composition according to Claim 12 wherein said buffer comprises citric acid and sodium citrate.

14. A composition according to Claim 13 comprising from 10 ppm to about 1000 ppm, citric acid and sodium citrate wherein the ratio of acid to sodium salt is from 20: 3.

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15. A composition according to Claim 14 comprising 0.016% by weight of a citric acid/sodium citrate buffer system wherein the ratio of acid to sodium salt is 5:2.

16. A composition according to Claim 2 having a pH of from about 2 to about 5.

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17. A composition according to Claim 16 wherein said pH is from about 3 to about 4.

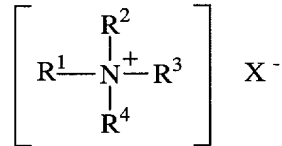
18. A composition according to Claim 17 having a pH of about 4.

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19. An aqueous composition for controlling plant and flower moisture transpiration, said composition comprising:

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- a) from about 0.1% by weight, of a source of energy;
- b) from about 1 ppm by weight, of an antimicrobial system, said system comprising:
- i) from 1% to 99% by weight, of said system, of one or more isothiazolone antimicrobials;
 - ii) from 1% to 99% by weight, of said system, of one or more antimicrobials having the formula:



wherein R^1 and R^2 are each independently C_8 - C_{20} linear or branched alkyl, benzyl, and mixtures thereof; R^3 and R^4 are each independently C_1 - C_4 alkyl, and mixtures thereof; X is an anion of sufficient charge to provide electronic neutrality;

- c) from about 10 ppm by weight, of a buffer; and
- d) the balance carriers and adjunct ingredients.

20. A composition according to Claim 19 wherein at least one antimicrobial comprises R^1 and R^2 are each C_{12} alkyl; R^3 and R^4 are each methyl; X is chlorine.
21. A composition according to Claim 19 wherein at least one antimicrobial comprises R^1 is a mixture of C_{12} - C_{16} alkyl; R^2 is benzyl, R^3 and R^4 are each methyl; X is chlorine.
22. A composition according to Claim 19 wherein said antimicrobial is an antimicrobial system comprising:
- i) from 10 ppm to 200 ppm by weight, of didecyl dimethyl ammonium chloride;
 - ii) from 10 ppm to 200 ppm by weight, of n-alkyl dimethyl benzyl ammonium chloride wherein n-alkyl comprises an admixture of C_{12} , C_{14} , and C_{16} linear alkyl chains; and
 - iii) from 1 ppm to 100 ppm by weight, of 1,2-benzisothiazolin-3-one.
23. A composition according to Claim 22 wherein said antimicrobial is an antimicrobial system comprising:

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- i) 100 ppm by weight of said composition, of didecyl dimethyl ammonium chloride;
 - ii) 100 ppm by weight of said composition, of n-alkyl dimethyl benzyl ammonium chloride wherein n-alkyl comprises an admixture of C₁₂, C₁₄, and C₁₆ linear alkyl chains; and
 - iii) 50 ppm by weight of said composition, of 1,2-benzisothiazolin-3-one.
24. A system according to Claim 19 further comprising a calcium ion sequestrant.
- 10 25. A composition according to Claim 19 having a pH of from about 2 to about 5.
26. A composition according to Claim 25 wherein said pH is from about 3 to about 4.
27. A composition according to Claim 26 having a pH of about 4.
- 15 28. A composition according to Claim 19 wherein said source of energy comprises a saccharide, oligosaccharide, polysaccharide, or mixtures thereof.
29. A composition according to Claim 28 wherein said source of energy comprises sucrose, glucose, or mixtures thereof.
- 20 30. A composition according to Claim 29 wherein said source of energy is glucose.
31. A non-liquid composition for controlling plant and flower moisture transpiration, said composition comprising:
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- a) from about 75% by weight, of a source of energy;
 - b) from about 0.05% by weight, of one or more antimicrobials;
 - c) from about 0.01% by weight, of a buffer; and
 - d) the adjunct ingredients.
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32. A composition according to Claim 31 comprising from about 90% by weight, of a source of energy.

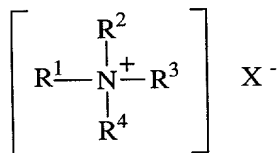
33. A composition according to Claim 32 comprising from about 95% by weight, of a source of energy.
34. A composition according to Claim 33 comprising from about 99% by weight, of a source of energy.
35. A composition according to Claim 31 comprising from about 0.01% to about 2% by weight, of an anti-microbial.
36. A composition according to Claim 35 comprising from about 0.05% to about 0.5% by weight, of an anti-microbial.
37. A composition according to Claim 36 comprising from about 0.05% to about 0.1% by weight, of an anti-microbial.
38. A granular composition for dilution by a carrier, said composition for controlling plant and flower moisture transpiration, said composition comprising:
- from about 75% by weight, of a source of energy;
 - from about 0.01% by weight, of an antimicrobial system, said system comprising:
 - from 1% to 99% by weight, of said system, of one or more isothiazolone antimicrobials;
 - from 1% to 99% by weight, of said system, of one or more antimicrobials having the formula:

$$\left[\begin{array}{c} \text{R}^2 \\ | \\ \text{R}^1 - \text{N}^+ - \text{R}^3 \\ | \\ \text{R}^4 \end{array} \right] \text{X}^-$$

wherein R^1 and R^2 are each independently C_8 - C_{20} linear or branched alkyl, benzyl, and mixtures thereof; R^3 and R^4 are each independently C_1 - C_4 alkyl, and mixtures thereof; X is an anion of sufficient charge to provide electronic neutrality;
 - from about 0.98% by weight, of a buffer; and
 - the balance adjunct ingredients.

40. A composition according to Claim 39 wherein said buffer comprises citric acid and sodium citrate.

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